

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

IN RE APPLICATION OF: )  
Ehling, et al. )  
Serial No.: to be determined )  
Filed: 08/02/2001 )  
For: METHOD AND DEVICE FOR )  
CONDITIONING COMMINUTED )  
TOBACCO MATERIAL )

**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents  
Box Patent Application  
Washington, D.C. 20231

Dear Sir:

Please enter the enclosed Preliminary Amendment that is respectfully submitted to  
append the claims in the above referenced application.

**IN THE CLAIMS**

Please add the following new claims.

16. (New) A device for conditioning tobacco material, comprising:
  - a chamber having an inlet and an outlet;
  - a first wheel sluice at said inlet and a second wheel sluice at said outlet;
  - at least one water vapor nozzle located within said chamber;
  - said chamber maintaining a hyperbaric pressure of more than 1 bar.
17. (New) The device for conditioning tobacco material of claim 16 wherein said chamber is

aligned in vertical direction, said inlet of said chamber vertically above said outlet of said chamber.

18. (New) The device for conditioning tobacco material of claim 17 wherein said at least one water vapor nozzle is comprised of a plurality of water vapor nozzles within an interior surface of said chamber.

19. (New) The device for conditioning tobacco material of claim 18 wherein said plurality of water vapor nozzles are directed downward.

20. (New) The device for conditioning tobacco material of claim 16 further comprising a heating jacket surrounding said chamber.

21. (New) The device for conditioning tobacco material of claim 17 wherein said tobacco material descends downward through said chamber from said inlet to said outlet.

22. (New) The device for conditioning tobacco material of claim 21 wherein said first wheel sluice and said second wheel sluice are pressure differential sluices.

23. (New) The device for conditioning tobacco material of claim 22 wherein said first wheel sluice has a first predetermined conveying volume and said second wheel sluice has a second predetermined volume, said first predetermined volume less than said second predetermined volume.

24. (New) The device for conditioning tobacco of claim 23 further comprising an airflow dryer in flow communication with said second wheel sluice.

25. (New) A device for conditioning tobacco material, comprising:  
a hyperbaric chamber having an inlet and an outlet;

a first pressure differential proof wheel sluice at said inlet of said hyperbaric chamber;  
a second pressure differential proof wheel sluice at said outlet end of said hyperbaric chamber;  
a plurality of nozzles within said chamber in flow communication with a vapor source;  
a heating jacket surrounding said hyperbaric chamber;  
wherein a hyperbaric pressure of more than 1 bar is maintained within said chamber.

26. (New) The device for conditioning tobacco material of claim 25 wherein said vapor source is superheated vapor having a temperature between about 100° C and 200° C.

27. (New) A device for conditioning tobacco material, comprising:

a hyperbaric chamber having an upper inlet and a lower outlet, said upper inlet having a pressure differential wheel sluice and said lower outlet having a pressure differential wheel sluice;

said hyperbaric chamber having at least one nozzle formed on an interior surface thereof in flow communication with a vapor source, said nozzle in flow communication with superheated vapor having a temperature between about 100° C and 200° C;

said hyperbaric chamber having a pressure of greater than 1 bar and having a heating jacket formed around an exterior surface;

said pressure differential wheel sluice in said upper inlet having a lower conveying volume than said pressure differential wheel sluice in said lower outlet.

28. (New) The device of claim 27 wherein said chamber tapers outwardly from said inlet to said outlet.

29. (New) The device of claim 27 wherein said heating jacket is in flow communication with a superheated vapor source.

30. (New) The device of claim 29 wherein said at least one nozzle in said chamber is a ring

nozzle formed integral with said interior surface of said chamber.

31. (New) A device for conditioning tobacco material, comprising:

a hyperbaric chamber having an upper inlet and a lower outlet, said upper inlet having a first pressure proof differential wheel sluice and said lower outlet having a second pressure proof differential wheel sluice;

a plurality of ring nozzles integrated with an interior surface of said hyperbaric chamber, each of said ring nozzles in flow communication with a superheated vapor source of a least 100° C;

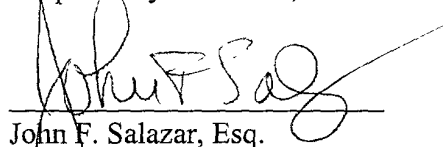
a heating jacket surrounding an exterior surface of said hyperbaric chamber, said heating jacket in flow communication with a heated vapor source;

wherein said hyperbaric chamber maintains an absolute pressure of about 2 to about 10 bars.

#### **REMARKS**

Entry of the above preliminary amendment is respectfully requested. Claims 1 through 31 are currently pending in the present application.

Respectfully submitted,



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